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Patent Claims:

1. Optical connector (1), in particular for establishing multimedia-connections in a motor vehicle according to
5 the MOST-standard, comprising:
 - a dielectric connector housing (40) with a receptacle (50) for mating connection with a complementary connector,
 - 10 at least an optical connection element (94, 96) in said connector housing (40) and for mating connection with a complementary optical connection element of the complementary connector,
 - 15 at least an electro-optical component (54, 56) with electronic circuits and ESD protection means (30)
 - wherein said ESD protection means (30) comprises at least one discharge section (34, 36, 38) projecting towards the receptacle and having a free end (34a, 36a, 38a) being exposed to the interior of the receptacle
20 (50) to provide an ESD protection within the receptacle (50).
2. Optical connector (1) according to Claim 1,
25 wherein the ESD protection means (30) comprises an electrically conductive discharge finger (64, 66, 68) terminating in said discharge section (34, 36, 38) and the discharge section (34, 36, 38) is arranged in the vicinity of the optical connection element (94, 96), in such a way that the discharge finger (64, 66, 68) forms
30 a lightning arrester for protection of the optical connection element (94, 96).
3. Optical connector (1) according to Claim 1 or 2,
35 wherein the discharge section (34, 36, 38) extends essentially parallel to the introduction direction (E)

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of the complementary connector.

4. Optical connector (1) according to one of claims 2 or 3,
wherein the receptacle includes a cavity (49)

5 having, at a front side, an opening for introducing the
complementary connector and

wherein the discharge finger (64, 66, 68) is
arranged at a rear side of the cavity (49) opposite to
the front side.

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5. Optical connector (1) according to one of the preceding
claims,

wherein the cavity (49) is bounded by a rear wall
(40b) at its rear side and the ESD protection means (30)
15 penetrates the rear wall (40b).

6. Optical connector (1) according to one of the preceding
claims,

20 wherein the ESD protection means (30) comprises an
electrically conductive discharge finger (64, 66, 68)
terminating in said discharge section (34, 36, 38) and
the rear wall (40b) has an opening into which the
discharge section (34, 36, 38) engages.

25 7. Optical connector (1) according to Claim 6,

wherein the discharge section (34, 36, 38) extends
through the opening and terminates essentially flush
with the rear wall (40b).

30 8. Optical connector (1) according to one of the preceding
claims,

wherein the ESD protection means (30) comprises a
plurality of discharge fingers (64, 66, 68).

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9. Optical connector (1) according to one of the preceding claims,

wherein the ESD protection means (30) has at least a first and second discharge finger (64, 66) with in each case an arm section extending transversely with respect to the introduction direction (E) of the complementary connector,

10 wherein said electro-optical component is a first electro-optical component (54) and the connector comprises a second electro-optical component (56), and

wherein the arm sections of the first and second discharge fingers (64, 66) are assigned to the first and second electro-optical component, respectively.

- 15 10. Optical connector (1) according to Claim 9,

wherein the first and second discharge fingers (64, 66) in each case have a connecting section which extends along the introduction direction (E) of the complementary connector and at which the respective arm section is suspended, which is in each case adjoined by at least one discharge section (34, 36, 38).

11. Optical connector (1) according to Claim 9 or 10,

25 wherein the arm sections of the first and second discharge fingers (64, 66) extend along a front side of the first and second electro-optical component, respectively.

12. Optical connector (1) according to one of Claims 9 to

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wherein the first and second discharge fingers are offset transversely with respect to the introduction direction (E).

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13. Optical connector (1) according to one of Claims 9 to 12,

wherein the first and second discharge fingers (64, 66) are formed asymmetrically.

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14. Optical connector (1) according to one of the preceding claims,

wherein said optical connection element (94, 96) is a first optical connection element (94, 96) and the connector has at least a second optical connection element (94, 96) for mating connection with a further complementary optical connection element of the complementary connector,

15 wherein the ESD protection means (30) has at least three discharge fingers (64, 66, 68) with in each case a discharge section (34, 36, 38),

wherein the first optical connection element is arranged between a first and a third of the discharge sections (34, 38),

20 wherein the second optical connection element is arranged between a second and the third of the discharge sections (36, 38), and

25 wherein the third discharge section (38) is arranged between the first and second optical connection elements.

15. Optical connector (1) according to Claim 14,

30 wherein the receptacle has a cavity (49), the cavity (49) has at a front side an opening for introducing the complementary connector, the cavity (49) is bounded by a rear wall (40b) at a rear side opposite to the front side, and the rear wall (40b) has at least three openings through which in each case one of the discharge sections extends.

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16. Optical connector (1) according to Claim 14 or 15,
wherein the first, second and third discharge
fingers are stamped and formed in one piece from sheet
metal.
17. Optical connector (1) according to one of the preceding
claims,
wherein the ESD protection means (30) has a
dedicated connection element for connection to an
electrical circuit board.
18. Optical connector (1) according to one of the preceding
claims,
wherein the connector has an external electrical
shielding (2).
19. Optical connector (1) according to Claim 18,
wherein the external electrical shielding (2)
penetrates the connector housing (40).
20. Optical connector (1) according to Claim 18 or 19,
wherein the shielding (2) is designed in the form
of an essentially U-shaped clamp which engages around
the connector housing (4) rearwards.
21. Optical connector (1) according to Claim 20,
wherein the ESD protection means (30) is arranged
essentially centrally in the U-shaped clamp.
22. Optical connector (1) according to Claim 20 or 21,
wherein the clamp has integrally formed press-on
lugs which are biased against the rear side of the
electro-optical components in order to apply force to
the latter counter to the introduction direction (E).

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23. Optical connector (1), in particular for establishing multimedia-connections in a motor vehicle according to the MOST-standard and in particular according one of the preceding claims, comprising:

5 a dielectric connector housing (40) with a receptacle (50) for mating connection with a complementary connector,

10 at least an optical connection element (94, 96) in said connector housing (40) and for mating connection with a complementary optical connection element of the complementary connector,

15 at least an electro-optical component (54, 56) with electronic circuits and

15 at least an electrically conductive protection element (30) against electrical discharges in the region of the receptacle (50).

24. Optical connector (1) according to claim 23,

20 wherein said protection element (30) penetrates said connector housing (40) to provide an ESD-protection within said connector.

25. Use of a protection element (30) against electrostatic

25 discharges with an optical connector (1), in particular according to the MOST-standard, with a receptacle (50) in a connector housing (40) for mating connection with a complementary connector and with optical connection elements (94, 96) which are positioned in said

30 receptacle, wherein said protection element (30) is provided in such a way in the region of the optical connection elements (94, 96) that said protection element prevents an electrostatic discharge from an object which is introduced into said receptacle (50) onto said optical connection elements (94, 96) within

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said connector.

26. Use according to claim 25,
wherein said protection element penetrates said
5 connector housing (40).